

[illegible]

<120> METHODS AND MATERIALS RELATING TO LEUCINE-RICH REPEAT PROTEIN-LIKE (LRR PROTEIN-LIKE) POLYPEPTIDES AND POLYNUCLEOTIDES

<140> NOT YET ASIGNED  
<141> 2000-09-27

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<150>  US 09/496,914
<151>  2000-02-03
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&lt;170&gt; PatentIn version 3.0

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**THE UNIVERSITY OF CHICAGO**

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002250" 092700

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Gln	Leu	Ser	Glu	Leu	His	Leu	Ala	Pro	Gly	Leu	Ala	Ser	Cys	Leu	Gly	
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Ser	Leu	Arg	Leu	Phe	Asn	Leu	Ser	Ser	Asn	Gln	Leu	Leu	Gly	Val	Pro	
385					390					395					400	

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Pro Gly Leu Phe Ala Asn Ala Arg Asn Ile Thr Thr Leu Asp Met Ser  
405 410 415

His Asn Gln Ile Ser Leu Cys Pro Leu Pro Ala Ala Ser Asp Arg Val  
420 425 430

Gly Pro Pro Ser Cys Val Asp Phe Arg Asn Met Ala Ser Leu Arg Ser  
435 440 445

Leu Ser Leu Glu Gly Cys Gly Leu Gly Ala Leu Pro Asp Cys Pro Phe  
450 455 460

Gln Gly Thr Ser Leu Thr Tyr Leu Asp Leu Ser Ser Asn Trp Gly Val  
465 470 475 480

Leu Asn Gly Ser Leu Ala Pro Leu Gln Asp Val Ala Pro Met Leu Gln  
485 490 495

Val Leu Ser Leu Arg Asn Met Gly Leu His Ser Ser Phe Met Ala Leu  
500 505 510

Asp Phe Ser Gly Phe Gly Asn Leu Arg Asp Leu Asp Leu Ser Gly Asn  
515 520 525

Cys Leu Pro Ile Phe Pro Arg Phe Gly Gly Ser Leu Ala Leu Glu Thr  
530 535 540

Leu Asp Leu Arg Arg Asn Ser Leu Thr Ala Leu Pro Gln Lys Ala Val  
545 550 555 560

Ser Glu Gln Leu Ser Arg Gly Leu Arg Thr Ile Tyr Leu Ser Gln Asn  
565 570 575

Pro Tyr Asp Cys Cys Gly Val Asp Gly Trp Gly Ala Leu Gln His Gly  
580 585 590

Gln Thr Val Ala Asp Trp Ala Met Val Thr Cys Asn Leu Ser Ser Lys  
595 600 605

Ile Ile Arg Val Thr Glu Leu Pro Gly Gly Val Pro Arg Asp Cys Lys  
610 615 620

Trp Glu Arg Leu Asp Leu Gly Leu Leu Tyr Leu Val Leu Ile Leu Pro  
625 630 635 640

Ser Cys Leu Thr Leu Leu Val Ala Cys Thr Val Ile Val Leu Thr Phe  
645 650 655

Lys Lys Pro Leu Leu Gln Val Ile Lys Ser Arg Cys His Trp Ser Ser  
660 665 670

Val Tyr

<210> 18  
<211> 121  
<212> PRT  
<213> Homo sapiens  
<400> 18

Val Ser Leu Ala Gly Asn Thr Ile Met Arg Leu Asp Asp Ser Val Phe  
1 5 10 15

Glu Gly Leu Glu Arg Leu Arg Glu Leu Asp Leu Gln Arg Asn Tyr Ile  
20 25 30

Phe Glu Ile Glu Gly Gly Ala Phe Asp Gly Leu Ala Glu Leu Arg His  
35 40 45

Leu Asn Leu Ala Phe Asn Asn Leu Pro Cys Ile Val Asp Phe Gly Leu  
50 55 60

Thr Arg Leu Arg Val Leu Asn Val Ser Tyr Asn Val Leu Glu Trp Phe  
65 70 75 80

Leu Ala Thr Gly Gly Glu Ala Ala Phe Glu Leu Glu Thr Leu Asp Leu  
85 90 95

Ser His Asn Gln Leu Leu Phe Phe Pro Leu Leu Pro Gln Tyr Ser Lys  
100 105 110

Leu Arg Thr Leu Leu Leu Arg Asp Asn  
115 120

004260"1222960  
<210> 19  
<211> 626  
<212> PRT  
<213> Homo sapiens

<400> 19

Cys Lys Met Val Asp Lys Lys Val Ser Cys Gln Val Leu Gly Leu Leu  
1 5 10 15

Gln Val Pro Ser Val Leu Pro Pro Asp Thr Glu Thr Leu Asp Leu Ser  
20 25 30

Gly Asn Gln Leu Arg Ser Ile Leu Ala Ser Pro Leu Gly Phe Tyr Thr  
35 40 45

Ala Leu Arg His Leu Asp Leu Ser Thr Asn Glu Ile Ser Phe Leu Gln  
50 55 60

Pro Gly Ala Phe Gln Ala Leu Thr His Leu Glu His Leu Ser Leu Ala  
65 70 75 80

His Asn Arg Leu Ala Met Ala Thr Ala Leu Ser Ala Gly Gly Leu Gly  
85 90 95

Pro Leu Pro Arg Val Thr Ser Leu Asp Leu Ser Gly Asn Ser Leu Tyr  
100 105 110

Ser Gly Leu Leu Glu Arg Leu Leu Gly Glu Ala Pro Ser Leu His Thr  
115 120 125

Leu Ser Leu Ala Glu Asn Ser Leu Thr Arg Leu Thr Arg His Thr Phe  
130 135 140

Arg Asp Met Pro Ala Leu Glu Gln Leu Asp Leu His Ser Asn Val Leu

145                      150                      155                      160  
 Met Asp Ile Glu Asp Gly Ala Phe Glu Gly Leu Pro Arg Leu Thr His  
                                  165                                   170                                   175  
 Leu Asn Leu Ser Arg Asn Ser Leu Thr Cys Ile Ser Asp Phe Ser Leu  
                                  180                                   185                                   190  
 Gln Gln Leu Arg Val Leu Asp Leu Ser Cys Asn Ser Ile Glu Ala Phe  
                                  195                                   200                                   205  
 Gln Thr Ala Ser Gln Pro Gln Ala Glu Phe Gln Leu Thr Trp Leu Asp  
                                  210                                   215                                   220  
 Leu Arg Glu Asn Lys Leu Leu His Phe Pro Asp Leu Ala Ala Leu Pro  
                                  225                                   230                                   235                                   240  
 Arg Leu Ile Tyr Leu Asn Leu Ser Asn Asn Leu Ile Arg Leu Pro Thr  
                                  245                                   250                                   255  
 Gly Pro Pro Gln Asp Ser Lys Gly Ile His Ala Pro Ser Glu Gly Trp  
                                  260                                   265                                   270  
 Ser Ala Leu Pro Leu Ser Ala Pro Ser Gly Asn Ala Ser Gly Arg Pro  
                                  275                                   280                                   285  
 Leu Ser Gln Leu Leu Asn Leu Asp Leu Ser Tyr Asn Glu Ile Glu Leu  
                                  290                                   295                                   300  
 Ile Pro Asp Ser Phe Leu Glu His Leu Thr Ser Leu Cys Phe Leu Asn  
                                  305                                   310                                   315                                   320  
 Leu Ser Arg Asn Cys Leu Arg Thr Phe Glu Ala Arg Arg Leu Gly Ser  
                                  325                                   330                                   335  
 Leu Pro Cys Leu Met Leu Leu Asp Leu Ser His Asn Ala Leu Glu Thr  
                                  340                                   345                                   350  
 Leu Glu Leu Gly Ala Arg Ala Leu Gly Ser Leu Arg Thr Leu Leu Leu  
                                  355                                   360                                   365  
 Gln Gly Asn Ala Leu Arg Asp Leu Pro Pro Tyr Thr Phe Ala Asn Leu  
                                  370                                   375                                   380  
 Ala Ser Leu Gln Arg Leu Asn Leu Gln Gly Asn Arg Val Ser Pro Cys  
                                  385                                   390                                   395                                   400  
 Gly Gly Pro Asp Glu Pro Gly Pro Ser Gly Cys Val Ala Phe Ser Gly  
                                  405                                   410                                   415  
 Ile Thr Ser Leu Arg Ser Leu Ser Leu Val Asp Asn Glu Ile Glu Leu  
                                  420                                   425                                   430  
 Leu Arg Ala Gly Ala Phe Leu His Thr Pro Leu Thr Glu Leu Asp Leu  
                                  435                                   440                                   445  
 Ser Ser Asn Pro Gly Leu Glu Val Ala Thr Gly Ala Leu Gly Gly Leu  
                                  450                                   455                                   460  
 Glu Ala Ser Leu Glu Val Leu Ala Leu Gln Gly Asn Gly Leu Met Val



465                      470                      475                      480  
 Leu Gln Val Asp Leu Pro Cys Phe Ile Cys Leu Lys Arg Leu Asn Leu  
                                  485                      490                      495  
 Ala Glu Asn Arg Leu Ser His Leu Pro Ala Trp Thr Gln Ala Val Ser  
                                  500                      505                      510  
 Leu Glu Val Leu Asp Leu Arg Asn Asn Ser Phe Ser Leu Leu Pro Gly  
                                  515                      520                      525  
 Ser Ala Met Gly Gly Leu Glu Thr Ser Leu Arg Arg Leu Tyr Leu Gln  
                                  530                      535                      540  
 Gly Asn Pro Leu Ser Cys Cys Gly Asn Gly Trp Leu Ala Ala Gln Leu  
                                  545                      550                      555                      560  
 His Gln Gly Arg Val Asp Val Asp Ala Thr Gln Asp Leu Ile Cys Arg  
                                  565                      570                      575  
 Phe Ser Ser Gln Glu Glu Val Ser Leu Ser His Val Arg Pro Glu Asp  
                                  580                      585                      590  
 Cys Glu Lys Gly Gly Leu Lys Asn Ile Asn Leu Ile Ile Ile Leu Thr  
                                  595                      600                      605  
 Phe Ile Leu Val Ser Ala Ile Leu Leu Thr Thr Leu Ala Ala Cys Cys  
                                  610                      615                      620  
 Cys Val  
 625  
 <210> 20  
 <211> 510  
 <212> PRT  
 <213> Baboon  
 <400> 20  
 Pro Arg Ser Leu Glu Gly Ala Glu Pro Gly Thr Pro Gly Glu Ala Glu  
 1                      5                      10                      15  
 Gly Pro Ala Cys Pro Ala Thr Cys Ala Cys Ser Tyr Asp Asp Glu Val  
                                  20                      25                      30  
 Asn Glu Leu Ser Val Phe Cys Ser Ser Arg Asn Leu Thr Arg Leu Pro  
                                  35                      40                      45  
 Asp Gly Ile Pro Gly Gly Thr Gln Ala Leu Trp Leu Asp Ser Asn Asn  
                                  50                      55                      60  
 Leu Ser Ser Ile Pro Pro Ala Ala Phe Arg Asn Leu Ser Ser Leu Ala  
                                  65                      70                      75                      80  
 Phe Leu Asn Leu Gln Gly Gly Gln Leu Gly Ser Leu Glu Pro Gln Ala  
                                  85                      90                      95  
 Leu Leu Gly Leu Glu Asn Leu Cys His Leu His Leu Glu Arg Asn Gln  
                                  100                      105                      110

Leu Arg Ser Leu Ala Val Gly Thr Phe Ala Tyr Thr Pro Ala Leu Ala  
115 120 125

Leu Leu Gly Leu Ser Asn Asn Arg Leu Ser Arg Leu Glu Asp Gly Leu  
130 135 140

Phe Glu Gly Leu Gly Asn Leu Trp Asp Leu Asn Leu Gly Trp Asn Ser  
145 150 155 160

Leu Ala Val Leu Pro Asp Ala Ala Phe Arg Gly Leu Gly Gly Leu Arg  
165 170 175

Glu Leu Val Leu Ala Gly Asn Arg Leu Ala Tyr Leu Gln Pro Ala Leu  
180 185 190

Phe Ser Gly Leu Ala Glu Leu Arg Glu Leu Asp Leu Ser Arg Asn Ala  
195 200 205

Leu Arg Ala Ile Lys Ala Asn Val Phe Ala Gln Leu Pro Arg Leu Gln  
210 215 220

Lys Leu Tyr Leu Asp Arg Asn Leu Ile Ala Ala Val Ala Pro Gly Ala  
225 230 235 240

Phe Leu Gly Leu Lys Ala Leu Arg Trp Leu Asp Leu Ser His Asn Arg  
245 250 255

Val Ala Gly Leu Leu Glu Asp Thr Phe Pro Gly Leu Leu Gly Leu Arg  
260 265 270

Val Leu Arg Leu Ser His Asn Ala Ile Ala Ser Leu Arg Pro Arg Thr  
275 280 285

Phe Glu Asp Leu His Phe Leu Glu Glu Leu Gln Leu Gly His Asn Arg  
290 295 300

Ile Arg Gln Leu Ala Glu Arg Ser Phe Glu Gly Leu Gly Gln Leu Glu  
305 310 315 320

Val Leu Thr Leu Asp His Asn Gln Leu Gln Glu Val Lys Val Gly Ala  
325 330 335

Phe Leu Gly Leu Thr Asn Val Ala Val Met Asn Leu Ser Gly Asn Cys  
340 345 350

Leu Arg Asn Leu Pro Glu Gln Val Phe Arg Gly Leu Gly Lys Leu His  
355 360 365

Ser Leu His Leu Glu Gly Ser Cys Leu Gly Arg Ile Arg Pro His Thr  
370 375 380

Phe Ala Gly Leu Ser Gly Leu Arg Arg Leu Phe Leu Lys Asp Asn Gly  
385 390 395 400

Leu Val Gly Ile Glu Glu Gln Ser Leu Trp Gly Leu Ala Glu Leu Leu  
405 410 415

Glu Leu Asp Leu Thr Ser Asn Gln Leu Thr His Leu Pro His Gln Leu  
420 425 430

Phe Gln Gly Leu Gly Lys Leu Glu Tyr Leu Leu Leu Ser His Asn Arg  
 435 440 445

Leu Ala Glu Leu Pro Ala Asp Ala Leu Gly Pro Leu Gln Arg Ala Phe  
 450 455 460

Trp Leu Asp Val Ser His Asn Arg Leu Glu Ala Leu Pro Gly Ser Leu  
 465 470 475 480

Leu Ala Ser Leu Gly Arg Leu Arg Tyr Leu Asn Leu Arg Asn Asn Ser  
 485 490 495

Leu Arg Thr Phe Thr Pro Gln Pro Pro Gly Leu Glu Arg Leu  
 500 505 510

<210> 21  
 <211> 368  
 <212> PRT  
 <213> Homo sapiens

<400> 21

Gly Met Thr Val Leu Gln Arg Leu Met Ile Ser Asp Ser His Ile Ser  
 1 5 10 15

Ala Val Ala Pro Gly Thr Phe Ser Asp Leu Ile Lys Leu Lys Thr Leu  
 20 25 30

Arg Leu Ser Arg Asn Lys Ile Thr His Leu Pro Gly Ala Leu Leu Asp  
 35 40 45

Lys Met Val Leu Leu Glu Gln Leu Phe Leu Asp His Asn Ala Leu Arg  
 50 55 60

Gly Ile Asp Gln Asn Met Phe Gln Lys Leu Val Asn Leu Gln Glu Leu  
 65 70 75 80

Ala Leu Asn Gln Asn Gln Leu Asp Phe Leu Pro Ala Ser Leu Phe Thr  
 85 90 95

Asn Leu Glu Asn Leu Lys Leu Leu Asp Leu Ser Gly Asn Asn Leu Thr  
 100 105 110

His Leu Pro Lys Gly Leu Leu Gly Ala Gln Ala Lys Leu Glu Arg Leu  
 115 120 125

Leu Leu His Ser Asn Arg Leu Val Ser Leu Asp Ser Gly Leu Leu Asn  
 130 135 140

Ser Leu Gly Ala Leu Thr Glu Leu Gln Phe His Arg Asn His Ile Arg  
 145 150 155 160

Ser Ile Ala Pro Gly Ala Phe Asp Arg Leu Pro Asn Leu Ser Ser Leu  
 165 170 175

Thr Leu Ser Arg Asn His Leu Ala Phe Leu Pro Ser Ala Leu Phe Leu  
 180 185 190

His Ser His Asn Leu Thr Leu Leu Thr Leu Phe Glu Asn Pro Leu Ala  
 195 200 205

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Glu Leu Pro Gly Val Leu Phe Gly Glu Met Gly Gly Leu Gln Glu Leu  
210 215 220

Trp Leu Asn Arg Thr Gln Leu Arg Thr Leu Pro Ala Ala Ala Phe Arg  
225 230 235 240

Asn Leu Ser Arg Leu Arg Tyr Leu Gly Val Thr Leu Ser Pro Arg Leu  
245 250 255

Ser Ala Leu Pro Gln Gly Ala Phe Gln Gly Leu Gly Glu Leu Gln Val  
260 265 270

Leu Ala Leu His Ser Asn Gly Leu Thr Ala Leu Pro Asp Gly Leu Leu  
275 280 285

Arg Gly Leu Gly Lys Leu Arg Gln Val Ser Leu Arg Arg Asn Arg Leu  
290 295 300

Arg Ala Leu Pro Arg Ala Leu Phe Arg Asn Leu Ser Ser Leu Glu Ser  
305 310 315 320

Val Gln Leu Asp His Asn Gln Leu Glu Thr Leu Pro Gly Asp Val Phe  
325 330 335

Gly Ala Leu Pro Arg Leu Thr Glu Val Leu Leu Gly His Asn Ser Trp  
340 345 350

Arg Cys Asp Cys Gly Leu Gly Pro Phe Leu Gly Trp Leu Arg Gln His  
355 360 365

<210> 22

<211> 457

<212> PRT

<213> synthetic construct

<400> 22

Gly Thr Gln Ala Leu Trp Leu Asp Gly Asn Asn Leu Ser Ser Val Pro  
1 5 10 15

Pro Ala Ala Phe Gln Asn Leu Ser Ser Leu Gly Phe Leu Asn Leu Gln  
20 25 30

Gly Gly Gln Leu Gly Ser Leu Glu Pro Gln Ala Leu Leu Gly Leu Glu  
35 40 45

Asn Leu Cys His Leu His Leu Glu Arg Asn Gln Leu Arg Ser Leu Ala  
50 55 60

Leu Gly Thr Phe Ala His Thr Pro Ala Leu Ala Ser Leu Gly Leu Ser  
65 70 75 80

Asn Asn Arg Leu Ser Arg Leu Glu Asp Gly Leu Phe Glu Gly Leu Gly  
85 90 95

Ser Leu Trp Asp Leu Asn Leu Gly Trp Asn Ser Leu Ala Val Leu Pro  
100 105 110

Asp Ala Ala Phe Arg Gly Leu Gly Ser Leu Arg Glu Leu Val Leu Ala

115

120

125

Gly Asn Arg Leu Ala Tyr Leu Gln Pro Ala Leu Phe Ser Gly Leu Ala  
130 135 140

Glu Leu Arg Glu Leu Asp Leu Ser Arg Asn Ala Leu Arg Ala Ile Lys  
145 150 155 160

Ala Asn Val Phe Val Gln Leu Pro Arg Leu Gln Lys Leu Tyr Leu Asp  
165 170 175

Arg Asn Leu Ile Ala Ala Val Ala Pro Gly Ala Phe Leu Gly Leu Lys  
180 185 190

Ala Leu Arg Trp Leu Asp Leu Ser His Asn Arg Val Ala Gly Leu Leu  
195 200 205

Glu Asp Thr Phe Pro Gly Leu Leu Gly Leu Arg Val Leu Arg Leu Ser  
210 215 220

His Asn Ala Ile Ala Ser Leu Arg Pro Arg Thr Phe Lys Asp Leu His  
225 230 235 240

Phe Leu Glu Glu Leu Gln Leu Gly His Asn Arg Ile Arg Gln Leu Ala  
245 250 255

Glu Arg Ser Phe Glu Gly Leu Gly Gln Leu Glu Val Leu Thr Leu Asp  
260 265 270

His Asn Gln Leu Gln Glu Val Lys Ala Gly Ala Phe Leu Gly Leu Thr  
275 280 285

Asn Val Ala Val Met Asn Leu Ser Gly Asn Cys Leu Arg Asn Leu Pro  
290 295 300

Glu Gln Val Phe Arg Gly Leu Gly Lys Leu His Ser Leu His Leu Glu  
305 310 315 320

Gly Ser Cys Leu Gly Arg Ile Arg Pro His Thr Phe Thr Gly Leu Ser  
325 330 335

Gly Leu Arg Arg Leu Phe Leu Lys Asp Asn Gly Leu Val Gly Ile Glu  
340 345 350

Glu Gln Ser Leu Trp Gly Leu Ala Glu Leu Leu Glu Leu Asp Leu Thr  
355 360 365

Ser Asn Gln Leu Thr His Leu Pro His Arg Leu Phe Gln Gly Leu Gly  
370 375 380

Lys Leu Glu Tyr Leu Leu Leu Ser Arg Asn Arg Leu Ala Glu Leu Pro  
385 390 395 400

Ala Asp Ala Leu Gly Pro Leu Gln Arg Ala Phe Trp Leu Asp Val Ser  
405 410 415

His Asn Arg Leu Glu Ala Leu Pro Asn Ser Leu Leu Ala Pro Leu Gly  
420 425 430

Arg Leu Arg Tyr Leu Ser Leu Arg Asn Asn Ser Leu Arg Thr Phe Thr

435

440

445

Pro Gln Pro Pro Gly Leu Glu Arg Leu  
450 455

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